

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 November 2005 (03.11.2005)

PCT

(10) International Publication Number  
**WO 2005/102439 A2**

(51) International Patent Classification<sup>7</sup>: **A61M 29/00**

(21) International Application Number:

PCT/US2005/013039

(22) International Filing Date: 15 April 2005 (15.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/562,456 15 April 2004 (15.04.2004) US

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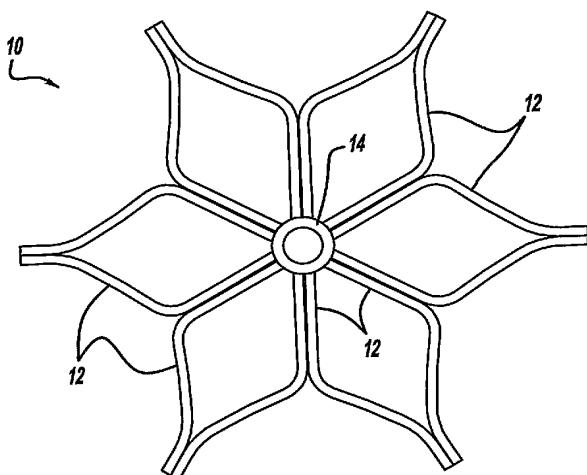
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

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(54) Title: LONG-TERM RETRIEVABLE MEDICAL FILTER

(57) Abstract: A medical filter has more than one pair of struts extending along an undulating path between a first and second end, which cooperate to define a first and second filter element having a plurality of cells, connected by a central portion with longitudinal strut sections. The struts extend between the first and second ends, and the struts tend to resiliently expand in radially outward directions from a compressed initial shape to an expanded deployed shape. In the expanded shape, the undulating path is defined by (i) a first portion of each pair of ribs extends substantially adjacent to each other for a distance from the first end, (ii) a second portion of each pair of ribs extends substantially adjacent to each other for a distance from the second end; and (iii) an intermediate portion of each one of a pair of ribs tends to curve away from each other. The filter may be placed in a blood vessel, for the purpose of intercepting thrombus. The filter may be introduced to a desired site for medical treatment through a catheter with a lumen or passage and a port or opening at or near a distal end of the catheter. In some cases, a filter may be used in a blood vessel, where cells of the vessel wall may grow among the elements of the filter, in a process called endothelialization. Where the filter is implanted in a blood vessel, it may be retrievable for a longer period of time, because the structure of the struts tend not to catch on the endothelial cells.



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SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

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